

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,232	03/31/2004	Brian Doyle	42P17292	9149
7590 11/02/2005			EXAMINER	
Michael A. Bernadicou			WOJCIECHOWICZ, EDWARD JOSEPH	
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Seventh Floor			ART UNIT	PAPER NUMBER
12400 Wilshire Boulevard			2815	
Los Angeles, C	CA 90025			

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		M				
	Application No.	Applicant(s)				
Office Action Comments	10/816,232	DOYLE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Edward Wojciechowicz	2815				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 At	<u>ugust 2005</u> .					
2a) ☐ This action is FINAL. 2b) ☒ This						
3) Since this application is in condition for allowar	3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 49	53 O.G. 213.				
Disposition of Claims		•				
4)⊠ Claim(s) <u>1-4,8,9 and 29-34</u> is/are pending in th	e application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4,8,9 and 29-34</u> is/are rejected.	6)⊠ Claim(s) <u>·1-4,8,9 and 29-34</u> is/are rejected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.	i				
Application Papers						
9)☐ The specification is objected to by the Examine						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form P1O-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a	i)-(d) or (f).				
 Certified copies of the priority documents have been received. 						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Date					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Patent Application (PTO-152)					

Application/Control Number: 10/816,232

Art Unit: 2815

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 8, 9, and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xiang, of record, in view of Long et al (6,744,101). As stated in the previous action, Xiang teaches the inventive concept of forming a gate electrode having a central portion and sidewall portions, wherein the two portions have different work functions.

Long also teaches a related device having a gate electrode with different portions which can have different work functions. For example, as seen in FIG. 3f of Long, and discussed at col. 5, I. 45 to col. 6, I. 10, the work function of the gate electrode can be varied to suit the circuit application. That is, the sidewall portions may have either a higher work function or a lower work function.

Consequently, one skilled in the art would be motivated to combine these references in order to adjust the work function of the different gate portions to be either higher or lower at the sidewall portions, depending on the particular circuit application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Wojciechowicz whose telephone number is 571-272-1739. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/816,232

Art Unit: 2815

.

Page 3

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

Information regarding the status of an application may be obtained from the Patent Application

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free).

Edward Wojciechowicz Primary Examiner

Art Unit 2815

EW: ew